

# इंटरनेट

# मानक

## Disclosure to Promote the Right To Information

Whereas the Parliament of India has set out to provide a practical regime of right to information for citizens to secure access to information under the control of public authorities, in order to promote transparency and accountability in the working of every public authority, and whereas the attached publication of the Bureau of Indian Standards is of particular interest to the public, particularly disadvantaged communities and those engaged in the pursuit of education and knowledge, the attached public safety standard is made available to promote the timely dissemination of this information in an accurate manner to the public.

“जानने का अधिकार, जीने का अधिकार”

Mazdoor Kisan Shakti Sangathan

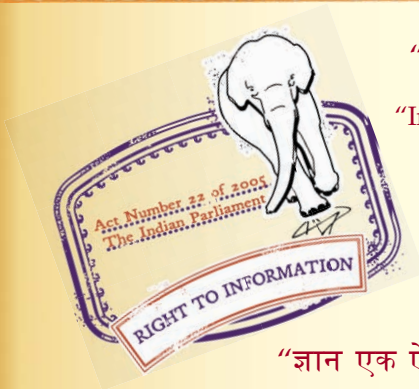
“The Right to Information, The Right to Live”

“पुराने को छोड़ नये के तरफ”

Jawaharlal Nehru

“Step Out From the Old to the New”

IS 7423 (1974): Dimensions for apron conveyors [MED 6: Continuous Bulk Conveying, Elevating, Hoisting Aerial Ropeways and Related Equipment]



“ज्ञान से एक नये भारत का निर्माण”

Satyanarayan Gangaram Pitroda

“Invent a New India Using Knowledge”



“ज्ञान एक ऐसा खजाना है जो कभी चुराया नहीं जा सकता है”

Bhartrhari—Nitiśatakam

“Knowledge is such a treasure which cannot be stolen”



BLANK PAGE



Conveyors, Vertical Hoists and Bucket Elevator Sectional Committee, EDC 61: Special Type Conveyors Subcommittee, EDC 61: 7 [ Ref: Doc : EDC 61 ( 2132 ) ]

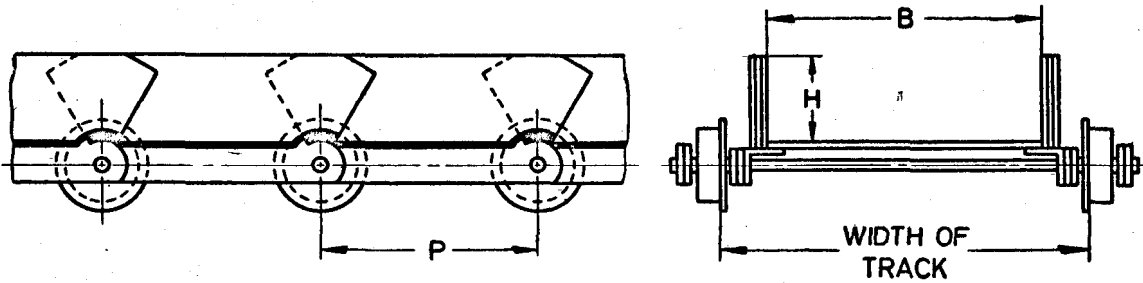


Indian Standard

DIMENSIONS FOR

APRON CONVEYORS

1. **Scope** — Lays down the main dimensions of apron conveyors for loose bulk materials.
2. **Terminology** — See IS : 4240-1967 ' Glossary of conveyor terms and definitions '.
3. **Dimensions**



3.1 The pitch of the chain shall be chosen from the following:

P, mm	63	80	100	125	160	200	250	315	400	500
-------	----	----	-----	-----	-----	-----	-----	-----	-----	-----

3.2 The width of the apron shall be chosen from the following:

B, mm	160	200	250	315	400	500	630	800	1 000	1 250	1 600	2 000	2 500
-------	-----	-----	-----	-----	-----	-----	-----	-----	-------	-------	-------	-------	-------

3.3 The height of check plates shall be chosen from the following:

H, mm	40	50	63	80	100	125	160	200	250	315	400	500
-------	----	----	----	----	-----	-----	-----	-----	-----	-----	-----	-----

3.4 *Width of Track* — The width of track is not standardized as, in addition to depending on the width of apron *B*, it also depends on the kind of load conveyed and the means of fixing the wheels.

4. **Styles of Aprons and Their Usages**

4.1 Style A aprons are used for horizontal and low-incline ( 20-25° ) heavy discharge service. With short pitches they are used in positive feeders. This style is suitable for most bulk materials, including hot, dusty abrasive materials, such as shakeout sand in foundries, limestone in cement mills, and ores in mining. The Style A1 has plain aprons whereas Style A2 has leak-proof pans.

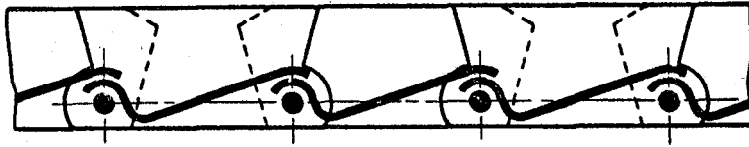


STYLE A1

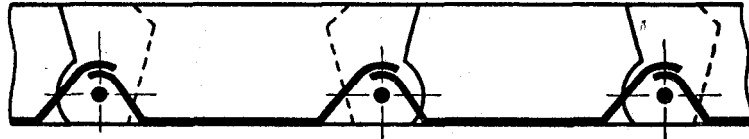


STYLE A2

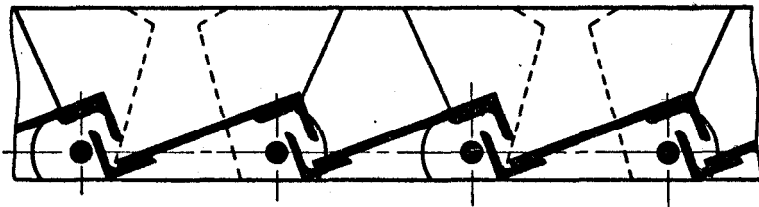
**4.2 Style B aprons** are designed to provide free and easy discharge and, consequently, low drop of material. This style is especially suited to handle lump material which should not be broken. It is also suitable for wide conveyors and can be used for inclined conveying up to 30 degrees.



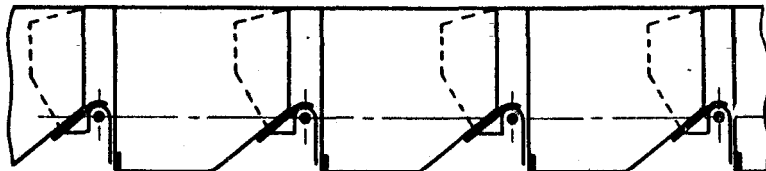
**4.3 Style C aprons** are used for large capacities of fines and lumps and inclines up to 30 degrees. They require a higher discharge point than Style B. They are suitable for use as feeding, picking, sorting and lowering conveyors.



**4.4 Style D aprons** are similar to Style B. Built of angles and plates, they are of very strong and rigid construction. These aprons are capable of carrying large quantities of material, such as coal, rock, ores and castings. The aprons have complete discharge with very little drop and breakage of lumps. They have good impact resistance under loading point.



**4.5 Style E aprons** are super-capacity aprons for handling fine, crushed, or lump materials in very large quantities. They can be used for horizontal conveying or inclined conveying as steep as 45 degrees.



**4.6 Style F aprons** are usually made of grey or malleable cast iron, and are commonly used for handling hot, gritty materials. When special corrosive materials are to be handled, aprons can be made of corrosion-resistant materials. Shallow aprons are limited to inclined conveying under 25 degrees; deep aprons can be used on inclines as steep as 45 degrees.



## EXPLANATORY NOTE

This standard is in conformity with ISO/R 2410-1971 'Continuous mechanical handling equipment for loose bulk materials, apron conveyors', issued by the International Organization for Standardization.